



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBST2120
Job Sheet 171613-A



Part No: RBST2120

Job Qty: 1 ea

Part Name: Drill Press Tri-Roller Staking Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 4/18/18

Job Tracking No:

Due Date: 4/2/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: RBST2100 REV.7 IPP REV:A 18.01.31 NEW ISSUE JFC VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		3/31/18	0.00	0.00	Start Up Small Fab-2		<i>SP</i>
110	Small Fab	1 pcs		4/2/18	0.00	1.00	Small Fab-3		<i>SB</i> <i>DAS</i>
120	QC	1 pcs		4/2/18	0.00	0.00	QC5		<i>38</i>
130	Packaging	1 pcs		4/2/18	0.00	0.00	Packaging3-1		<i>9-88</i>
140	QC21-SA	1 Ea		4/2/18	0.00	0.00	QC21		<i>18/04/18</i>

Part Op
Descriptions: 110 - Assemble as per DWG. Sheet 1

21
9-88 APR 19 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-832-1/4	Set Screw	1 Ea (1 ea)	90-Start up Operation	
RBST2120-1	Roller Fixture	1 Ea (1 ea)	90-Start up Operation	
RBST2120-11	Primary Seat	1 Ea (1 ea)	90-Start up Operation	
RBST2120-13	Secondary Seat	1 Ea (1 ea)	90-Start up Operation	
RBST2120-15	Locating Pin	2 Ea (2 ea)	90-Start up Operation	
RBST2120-3	Retainer	1 Ea (1 ea)	90-Start up Operation	
RBST2120-5	Roller	3 Ea (3 ea)	90-Start up Operation	
RBST2120-7	Guide	1 Ea (1 ea)	90-Start up Operation	
RBST2120-9	Pin	1 Ea (1 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	188-FPSS-832-1/4	1	87	0
	RBST2120-1	1	0	0
	RBST2120-11	1	0	0
	RBST2120-13	1	0	0
	RBST2120-15	2	2	0
	RBST2120-3	1	1	0
	RBST2120-5	3	26	0
	RBST2120-7	1	0	0
	RBST2120-9	1	0	0

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order Update only ☐

Work Order: _____		DISPOSITION		APPROVAL/PROCESS																																																																															
Part No. _____		Revised		Water Jet ☐ Engineering ☐																																																																															
NCR No. _____		Use Suspected Unapproved		d. Eng. Coord. ☐ Quality ☐																																																																															
Date : _____		Step #: _____		e/Packaging ☐ Other ☐																																																																															
Supplier				Supplier ☐																																																																															
Description Work Order Deviation				MRB (QSI042) Approval																																																																															
				Completed By																																																																															
				Lead hand / Supervisor Approval Verification																																																																															
				QC / QA Coordinator Approval																																																																															
Root Cause <table><tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td><td>Pressure/Forced</td><td>☐</td></tr><tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td><td>Bending</td><td>☐</td></tr><tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td><td>Centre Not Concentric</td><td>☐</td></tr><tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td><td>Cracks</td><td>☐</td></tr><tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td><td>Crimp/Kink/Ripple/Wave</td><td>☐</td></tr><tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td><td>Cuffs</td><td>☐</td></tr><tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td><td>Crushing</td><td>☐</td></tr><tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td><td>Heat Treat</td><td>☐</td></tr><tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td><td>Wave/Twist in Tube</td><td>☐</td></tr><tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td><td>Marks/Chatter</td><td>☐</td></tr><tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td></tr><tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td><td>Drill Holes</td><td>☐</td></tr><tr><td colspan="4"></td><td colspan="2">OTHER : _____</td></tr></table> DART AEROSPACE 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 613 632-8200 Email: sales@dartaero.com www.dartaerospace.com Container No: S062439 Part: RBS12120 Job No: 171613-A Serial No/Batch: S060772 Inspector: _____ Revision: 7						Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Design	☐	Operator	☐	Bending	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Material	☐	Use for Testing	☐	Cuffs	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Past Expiry Date	☐	Manufacturing Process	☐	Instructions Incomplete/Unclear	☐	Misidentified	☐	Past Due	☐	Drill Holes	☐					OTHER : _____	
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RBST2120
Job Sheet 171613



Part No: RBST2120

Job Qty: 1 Ea

Part Name: Drill Press Tri-Roller Staking Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/5/18

Job Tracking No:

Due Date: 2/16/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: RBST2100 REV.7 IPP REV:A 18.01.31 NEW ISSUE JFC VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		2/15/18	0.00	0.00	Start Up Small Fab-2		
110	Small Fab	1 pcs		2/16/18	0.00	1.00	Small Fab-3		
120	QC	1 pcs		2/16/18	0.00	0.00	QC5		
130	Packaging	1 pcs		2/16/18	0.00	0.00	Packaging3-1		
140	QC21-SA	1 Ea		2/16/18	0.00	0.00	QC21		

Part Op 110 - -Assemble as per DWG. Sheet 1
Descriptions:

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
97705A406	Screw 8-32 X 1/4 S.S. (Mcmaster)	1 Ea (1 ea)	90-Start up Operation	
RBST2120-1	Roller Fixture	1 Ea (1 ea)	90-Start up Operation	
RBST2120-11	Primary Seat	1 Ea (1 ea)	90-Start up Operation	
RBST2120-13	Secondary Seat	1 Ea (1 ea)	90-Start up Operation	
RBST2120-15	Locating Pin	2 Ea (2 ea)	90-Start up Operation	
RBST2120-3	Retainer	1 Ea (1 ea)	90-Start up Operation	
RBST2120-5	Roller	3 Ea (3 ea)	90-Start up Operation	
RBST2120-7	Guide	1 Ea (1 ea)	90-Start up Operation	
RBST2120-9	Pin	1 Ea (1 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	97705A406 3027241	1	17	0
	RBST2120-1 ✓	1	0	0
	RBST2120-11 ✓	1	0	0
	RBST2120-13 ✓	1	0	0
	RBST2120-15 ✓	2	0	0
	RBST2120-3 ✓	1	0	0
	RBST2120-5 ✓	3	0	0
	RBST2120-7 ✓	1	0	0
	RBST2120-9 ✓	1	0	0

Part Specifications

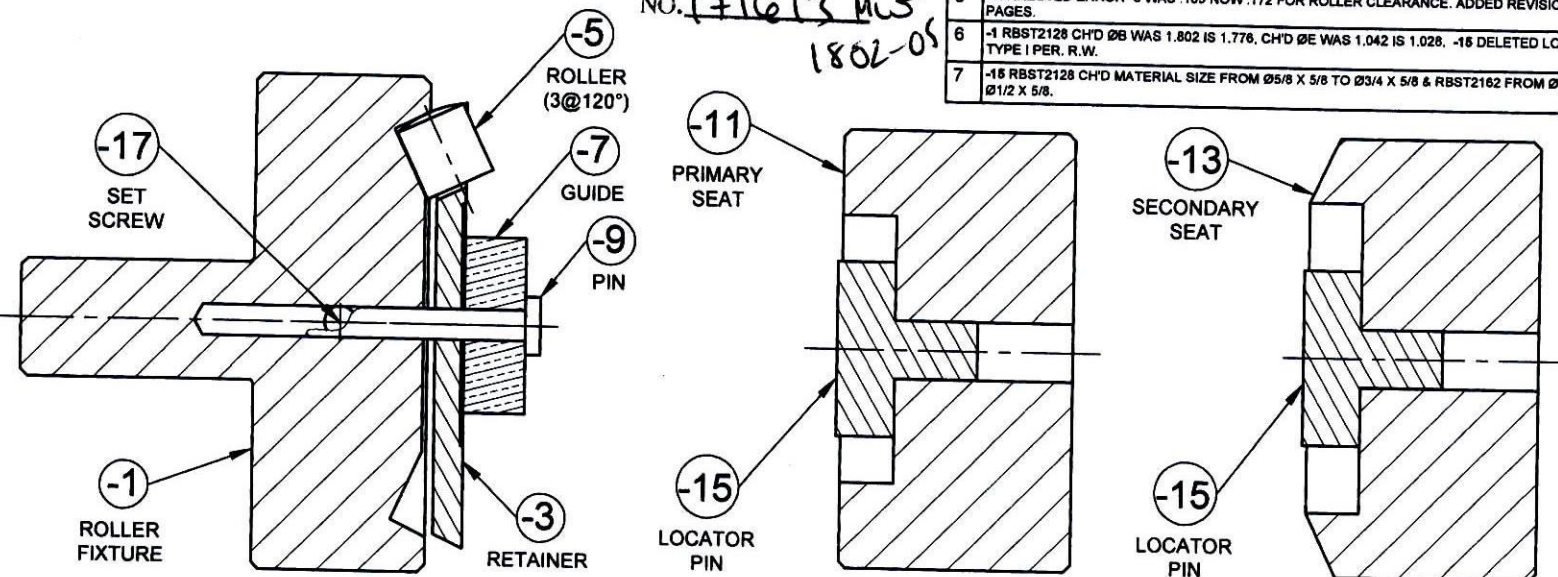
Specifications could not be found.

Plex 2/5/18 3:59 PM Dart.lajeunesse.marie

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 171613 MWS
1802-05

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	ADDED NOTE TO -1 BODY TO INSPECT BEFORE HEAT TREATING, ALSO CHANGED TOL., OF -1 ROLLER FIXTURE'S ØB, ØC, & ØE FROM +.002 -.000.	2/11/08	WP	DW
2	-15 CH'D LOCATING PIN TOLERANCE FROM Ø.2480 Ø.2475 TO Ø.250 P.F. -11 & -13. -11 & -13 CH'D FROM Ø.247 Ø.246 TO REAM Ø.290. REMOVED MS14102 & MS14104 CHAMFERED BEARINGS FROM LIST.	2/19/08	WP	GE
3	ADDED KST2128 & KST2162 -13 REMOVED 25° ANGLE FROM SECONDARY SEAT AND DELETED ØB DIMENSION. ADDED QTY TO -13 & -15 CHART.	4/22/08	WP	DW
4	-8 CH'D ROLLER RADIUS FROM .005 -.010, TO .015 -.020, -9 PIN RADIUS FROM .015 MAX., TO .015 MIN. CH'D -7 SLEEVE TO -7 GUIDE.	7/7/08	WP	DW
4A	CH'D T/N FROM KST2100.	11/19/09	RJC	
5	CORRECTED ERROR -3 WAS .165 NOW .172 FOR ROLLER CLEARANCE. ADDED REVISIONS TO ALL PAGES.	1/18/10	WP	DW
6	-1 RBST2128 CH'D ØB WAS 1.802 IS 1.776, CH'D ØE WAS 1.042 IS 1.028, -15 DELETED LOCATING PIN TYPE I PER. R.W.	9/10/13	CFS	GE
7	-15 RBST2128 CH'D MATERIAL SIZE FROM Ø5/8 X 5/8 TO Ø3/4 X 5/8 & RBST2162 FROM Ø3/8 X 5/8 TO Ø1/2 X 5/8.	11/5/13	JAG	GE



NOTES

- 5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
- 5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
- FLAT END OF ROLLERS MUST FACE TOWARDS THE CENTER OF THE TOOL WHEN ASSEMBLED.

BEARINGS & TOOLS COVERED	
BEARING #	TOOL #
406-310-403-101	RBST2120
412-010-427-101	RBST2128
406-312-100-101	RBST2162

ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	B/O INFORMATION OR SPECIFICATIONS	Pg.
		-1	1	ROLLER FIXTURE	SEE CHART	2
		-3	1	RETAINER	SEE CHART	3
		-5	3	ROLLER	SEE CHART	4
		-7	1	GUIDE	SEE CHART	5
		-9	1	PIN	SEE CHART	6
		-11	1	PRIMARY SEAT	SEE CHART	7
		-13	0 or 1	SECONDARY SEAT	SEE CHART	8
		-15	1 or 2	LOCATING PIN	SEE CHART	9
B/O		-17	1	SOCKET HEAD SET SCREW	#8-32 x 1/4	N/S

RED BARN MACHINE	
TITLE RBST2100 SERIES TRI-ROLLER SWAGING TOOL; ASSEMBLY	
DWG NO. TOOL# (see chart above)	REV 7
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	DRAWN BY: PERRITI
DECIMALS .XXX ± .005	APPROVED <i>D. Ward</i>
XX ± .01	HEAT TREAT LISTED PER ITEM
X ± .1	FINISH SPEC LISTED PER ITEM
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-4-08
SHEET	1 of 9